



CE Society President Stefan Mozar teaching young professionals about the tools and techniques used in project management.



CE Society President S. Mozar and attendees of the seminar (without order: Y. Jia, D. Miller, E.J. Palacois-Garcia, W.-T. Chen, Y.-T. Chang, H.A. Attallah Mohamed, S. Thavalengal, M. Goswami, Y. Lee, F. Groß, and S. Peterson) along with members of the ICCE-Berlin organizing team (F. Bellido, A. Huhn, D. Hepper, N. Gershon, and C. Dolar).

them will be the basis for starting your own company.

Traditionally, there is also a networking event on Monday evening at ICCE-Berlin. As Joe Decuir mentioned in his talk to young professionals at the ICCE conference in Las Vegas at the beginning of this year, networking is a cornerstone for a successful career. The IEEE CE Society tries to help its young professionals build their international professional network by bringing them together with experienced and established persons in the CE community. This time, the young professionals were invited along with the other attendees of ICCE-Berlin to enjoy a good round of karaoke (also a tradition within the CE Society), chat about the impressions of the conference, and get to know fellow researchers from all over the world.

So if you are a young professional, i.e., if you graduated within the last ten years, keep an eye out for the activities for young professionals at the IEEE CE Society conferences. You are very welcome to join, even if you are not an IEEE Member. Also, if you are interested in getting involved in the IEEE CE Society as a young professional, please contact me by e-mail at carsten.dolar@ieee.org. Currently, I am looking for someone to build up the CE Society's Young Professionals Linked In group.

—Carsten Dolar

Picture Perfect: CPIQ and You

I got my first cell phone in the late 1990s. I don't remember the model, but it was a very basic handset to be used primarily in case of an

emergency. And it certainly didn't have a camera.

Fast-forward 15 years later, and the age of the smartphone is upon us. The world is at our fingertips. As U.S. smartphone market penetration surges to nearly two-thirds of mobile users, consumers have many handset options from which

to choose, each with its own selling points. Many of these handsets feature cameras and apps to entice consumers.

There's no shortage of camera and editing apps available for smartphones these days. Do you want to add a border to your picture? There's an app for that. Do you want your shot to look like

a 1970s-era family photo? There's an app for that. Do you want to swap your face with Donald Trump's? There's an app for that. Smartphone users can now shoot and edit films on a smartphone and share them with their friends and family.

As a photography enthusiast, I've taken several thousand photos over the years with different cameras, including 35-mm film, DSLR, and mobile phone cameras. Composing a shot with a mobile phone camera is the same as shooting with any other digital camera—or even a 35-mm film camera. The main difference resides in the quality of the image once the shutter clicks. The slightest movement can lead to a blurry image.

As the smartphone wars rage on, consumers have been bombarded with promises of better cameras: *Buy this*

phone now! Because more pixels must equal better pictures, right? That's not always the case. The user must also consider other variables such as ambient lighting and shutter speed when selecting a mobile phone camera.

IEEE is developing a standard to address the needs of consumers who seek to be savvier about choices in mobile phone cameras. The IEEE P1858 Draft Standard for Camera Phone Image Quality (CPIQ) (<http://standards.ieee.org/develop/project/1858.html>) is intended to create a set of criteria to test and measure mobile phone cameras under certain conditions such as low or bright lighting. One of the goals of IEEE P1858 is to define the standard language with which carriers, handset manufacturers, and component vendors can communicate the results to each other regarding camera phone image quality.

The goal of IEEE P1858 is to enable a rating system for mobile phone cameras. Think of a Zagat-style guide for mobile phone consumers. Wireless carriers, manufacturers, and reviewers would be able to effectively convey the image quality of mobile cameras to consumers. Empowered amateur photographers like me would be able to select the right mobile cameras for our needs.

IEEE P1858 is an example of how open and transparent collaboration through the IEEE Standards Association can benefit a whole market. When like-minded companies set out with a common goal and achieve consensus, everyone benefits—consumers and manufacturers alike.

— Jeffrey Pane,
Solutions Marketing Specialist
IEEE Standards Association

How IEEE-ISTO Advances Consumer Technology

From wireless lighting and power to identity management on the Internet and a host of other innovations, the IEEE Industry Standards and Technology Organization (IEEE-ISTO) advances varied technologies to the benefit of industry and consumers.

Celebrating its 15th anniversary in 2014, IEEE-ISTO (www.ieee-isto.org) was created in January 1999 as a global, not-for-profit corporation with the intention of accelerating and extending standards development and adoption activities for technology industry consortia. In the 15 years since, IEEE-ISTO has helped establish and support more than 40 programs with an increasingly wide range of technologies, including important

consumer technologies, to bring industry standards to fruition and to help ensure that each program achieves its mission and eventual marketplace success. Today, the IEEE-ISTO is a federation of 17 independent programs that take advantage of a range of operational support provided by the IEEE-ISTO and its expert staff.

The impact on consumer technologies, specifically, has been profound. Many of IEEE-ISTO's participant programs are directly influencing consumer technologies that are changing the ways that people live around the globe.

Mobile devices are now ubiquitous, and the Wireless Power Consortium (WPC) (www.wirelesspowerconsortium.com), established in 2008, believes that wireless charging is the better solution. Much more convenient than plugging in a wire with a connector, WPC members

believe that wireless chargers must be compatible. Consumers don't value chargers that work with one phone and not another. The mission is to establish a global standard for wireless charging that makes wireless chargers compatible with all phones and other battery-operated products. With the IEEE-ISTO's support, it has developed the Qi specification for low-power wireless charging that is available in more than 500 certified products.

Another example of IEEE-ISTO-supported consumer technologies, The Connected Lighting Alliance (www.theconnectedlightingalliance.org) was formed in August 2012 as a nonprofit organization constituted of the leading companies in the lighting industry to drive the adoption of wireless technologies for simple, convenient, and cost-effective lighting control. Consumers value the